

In the Claims:

Please cancel claims 24, 36-37, 40-41, 43, 45, 49, and 51-57. Please amend claims 23, 25, 32-33, and 35. Please add new claims 58-68. The claims are as follows:

1-22. (Canceled)

23. (Currently amended) A method for forming a device, comprising the following steps of:

providing a fluoropolymer matrix having particles therein;

coating a first resin comprising a thermosetting resin on the fluoropolymer matrix[[.]]

~~wherein the thermosetting resin includes a contrasting dye;~~

processing the fluoropolymer matrix with the first resin coated thereon such that material thermosetting resin from the first resin impregnates the fluoropolymer matrix, leaving a remaining layer of resin on a surface of the fluoropolymer matrix, wherein the remaining layer of resin comprises material thermosetting resin of the first resin that has not impregnated the fluoropolymer matrix; and

coating a second resin comprising the thermosetting resin on a surface of a conductor;

and

laminating the resin-impregnated fluoropolymer matrix to [[a]] the conductor having the second resin thereon, wherein the conductor, thermosetting resin of the second resin, and the remaining layer of resin are disposed on ~~opposite sides of~~ the resin-impregnated fluoropolymer matrix following the laminating step.

09/781,730

2

24. (Canceled)

25. (Currently amended) The method of claim 23, wherein the particles are inorganic particles each having a spherical shape and a diameter of less than 10 microns.

26-31. (Canceled)

32. (Currently amended) The method of claim 23, wherein the device is a printed circuit board or a chip carrier.

33. (Currently amended) The method of claim 23, wherein the device is a chip carrier step of providing the fluoropolymer matrix comprises introducing the particles into the fluoropolymer matrix in a form of liquid inorganic particles.

34. (Canceled)

35. (Previously presented) The method of claim 23, wherein the thermosetting resin includes solvent having a molecular weight not exceeding the molecular weight of methyl ethyl ketone.

36-57. (Canceled)

58. (New) A method for forming a device, comprising the steps of:

providing a fluoropolymer matrix having particles therein; and

forming a resin-impregnated fluoropolymer matrix such that a conductive layer is disposed within the fluoropolymer matrix and a dispersed resin comprising a thermosetting resin is dispersed within the fluoropolymer matrix, wherein a layer of resin comprising the thermosetting resin is disposed on a surface of the fluoropolymer matrix and is external to the fluoropolymer matrix, wherein the thermosetting resin includes a contrasting dye, and wherein the contrasting dye facilitates a visual contrast in the visible portion of the electromagnetic spectrum between the conductive layer and the fluoropolymer matrix.

59. (New) The method of claim 58, further comprising the step of laminating the resin-impregnated fluoropolymer matrix to a conductor, wherein the conductor and the layer of resin are disposed on opposite sides of the resin-impregnated fluoropolymer matrix following the laminating step.

60. (New) The method of claim 59, further comprising prior to the laminating step: coating a second resin comprising the thermosetting resin on a surface of the conductor, wherein during the laminating step the second resin is disposed between the fluoropolymer matrix and the conductor.

61. (New) The method of claim 58, wherein the step of forming the resin-impregnated fluoropolymer matrix comprises the steps of:

09/781,730

4

coating a first resin comprising the thermosetting resin on the fluoropolymer matrix; and processing the fluoropolymer matrix with the first resin coated thereon such that thermosetting resin from the first resin impregnates the fluoropolymer matrix to form the dispersed resin within the fluoropolymer matrix, leaving the layer of resin disposed on the surface of the fluoropolymer matrix and external to the fluoropolymer matrix, wherein the layer of resin comprises thermosetting resin of the first resin that has not impregnated the fluoropolymer matrix.

62. (New) The method of claim 61, further comprising the steps of:

coating a second resin comprising the thermosetting resin on a surface of a conductor;

and

after the step of coating the second resin, laminating the resin-impregnated fluoropolymer matrix to the conductor, wherein the conductor, thermosetting resin of the second resin, and the layer of resin are disposed on the resin-impregnated fluoropolymer matrix following the laminating step.

63. (New) The method of claim 62, wherein the step of coating the first resin comprises coating a varnish comprising the first resin on the fluoropolymer matrix, wherein prior to the step of coating the varnish the method comprises the step of adjusting the viscosity of the varnish so as to control a degree to which the thermosetting resin in the varnish impregnates the fluoropolymer matrix during the processing step.

64. (New) The method of claim 61, wherein the step of coating the first resin comprises coating a varnish comprising the first resin on the fluoropolymer matrix, wherein prior to the step of coating the varnish the method comprises the step of adjusting the viscosity of the varnish so as to control a degree to which the thermosetting resin in the varnish impregnates the fluoropolymer matrix during the processing step.

65. (New) The method of claim 58, wherein the thermosetting resin includes solvent having a molecular weight not exceeding the molecular weight of methyl ethyl ketone.

66. (New) The method of claim 58, wherein the device is a printed circuit board or a chip carrier.

67. (New) The method of claim 58, wherein the particles are inorganic particles each having a spherical shape and a diameter of less than 10 microns.

68. (New) The method of claim 58, wherein the step of providing the fluoropolymer matrix comprises introducing the particles into the fluoropolymer matrix in a form of liquid inorganic particles.

69. (New) A method for forming a device, comprising the following steps:

- providing a fluoropolymer matrix having particles therein;
- providing a varnish having a thermosetting resin therein;
- coating the varnish on the fluoropolymer matrix; and
- processing the fluoropolymer matrix with the varnish coated thereon such that thermosetting resin from the varnish impregnates the fluoropolymer matrix, leaving a remaining layer of resin on a surface of the fluoropolymer matrix, wherein the remaining layer of resin comprises thermosetting resin of the varnish that has not impregnated the fluoropolymer matrix, and wherein the step of providing the varnish having the thermosetting resin therein comprises adjusting the viscosity of the varnish so as to control a degree to which the thermosetting resin in the varnish impregnates the fluoropolymer matrix during the processing step.

70. (New) The method of claim 69, further comprising the steps of:

- coating a resin comprising the thermosetting resin on a surface of a conductor; and
- after the step of coating the resin, laminating the resin-impregnated fluoropolymer matrix to the conductor, wherein the conductor, thermosetting resin of the coated resin, and the layer of resin are disposed on the resin-impregnated fluoropolymer matrix following the laminating step.

71. (New) The method of claim 69, wherein the thermosetting resin includes solvent having a molecular weight not exceeding the molecular weight of methyl ethyl ketone.

72. (New) The method of claim 69, wherein the device is a printed circuit board or a chip carrier.

09/781,730

7

73. (New) The method of claim 69, wherein the particles are inorganic particles each having a spherical shape and a diameter of less than 10 microns.

74. (New) The method of claim 69, wherein the step of providing the fluoropolymer matrix comprises introducing the particles into the fluoropolymer matrix in a form of liquid inorganic particles.